

ABSTRACT

Systems and methods for improving network throughput in a packet ties to network communication environment. In one aspect here of, delays associated with retransmission of a packet or reduced to improve total performance and bandwidth utilization on the communication network medium. A roundtrip time parameter of TCP/IP communications networks may be adjusted according to actual measured response time of a successful packet transmission and used as a timeout value to detect a possible packet loss sooner than previous techniques. Another aspect hereof provides for dynamically adjusting estimated available bandwidth of the communication medium. The estimated available bandwidth is then useful to better avoid congestion on the medium and the resulting packet loss.